

Deixis & Restrictive Modification
Eli Sharf, UC Santa Cruz

An observation. Kaplan (1989) suggests that demonstratives might be lexically ambiguous between deictic and anaphoric uses [1-2]. Indexical adverbs like *here* and *there* show a different but related heterogeneity. They are able to reference locations in the perceptual field of the speakers (1) as well as locations broader than or outside of this perceptual field (2):

- (1) [*The speaker gestures at Marie.*] Marie here gives such great talks.
- (2) The chairs here (at this conference) are so comfortable.

Following Heller & Wolter (2014) [3], I call the former use “perceptually grounded” and the latter “non perceptually grounded”.

In this work I present novel data that show that natural language is sensitive to this distinction. *Here* in (3a) below cannot be used to refer to the conference the speaker is attending; in (3b), this interpretation is allowed.

- (3) *Two students go outside of the conference room during a particularly stimulating talk by their mutual acquaintance Marie.*
 - a. #Marie here gives such great talks.
 - b. The chairs here are so comfortable.

The contrast above extends to all “uniquely referring” noun phrases. Unique noun phrases (like proper nouns) can be modified by one of these adverbs *only* when the location picked out by the adverb and the referent of the noun are perceptually grounded.

- (4) [*Context of (3), but the presenter is the speaker’s husband (a) or the Pope (b).*]
 - a. #My husband here gives such great talks
 - b. #The Pope here gives such great talks.

Analysis. One might use the contrast above as evidence for lexical ambiguity. I show that a unified analysis is possible by deriving the contrast from conditions on restrictive modification. My analysis relies on the idea that noun phrases are sensitive to contextually given “modes of identification”, such as *ostension*, *naming*, and *description*, formalized by Aloni (2001)’s “conceptual covers” [4-5]. Indeed, “uniquely referring” noun phrases are only unique relative to their usual modes of identification; under the mode of *ostension*, they can be further restricted.

Conditions on restrictive modification are usually defined in terms of the extension of the noun and the modifier [6]. This work makes the case that they are sensitive to information-structural and perspectival information as well. Stated simply, restrictive modification is only allowed when the identity of the referent is still up for debate in the context: that is, there is still a question of identity. The modifier (*M*) together with the noun (*N*) must provide an answer to a non-trivial question raised by the noun:

- (5) Let *N*, *M*, and *C* designate properties, where *C* is a property given by the context for domain restriction. Let $Q_{\text{ident}} = ?x_n[x_n = ty. [N(y) \wedge C(y)]]$ be a question of identity raised by *N*, where *n* is an index mapped by a perspective \mathfrak{P} to the conceptual cover given by the context. *N* \wedge *M* is only felicitous if...
 - a. $[[ty[N(y) \wedge M(y)]]]^{w.gP}$ denotes an answer to Q_{ident} under \mathfrak{P} .
 - b. Q_{ident} is non-trivial under \mathfrak{P} .

Triviality is defined as a singleton partition in Groenendijk & Stokhof’s semantics for questions [7]. Answerhood is defined as picking out some cell in the partition. The contrast in (3) is derived in this way: under the *ostension* cover, (3a) is infelicitous because Marie is not proximal to the speaker (condition 5a; answers cannot be empty). Under the naming cover, $?x_n[x_n = Marie]$ is trivial, and thus ruled on out pragmatic grounds (condition 5b). In contrast, non-unique noun phrases like *chairs* (3b) give rise to non-trivial questions of identity under their usual descriptive covers. This analysis can be extended to all noun phrases that are unique in virtue of their descriptive content (4).

Alternative. An alternative analysis based on Heller & Wolter (2014)’s theory of perceptual grounding is explored. This theory also can explain the contrast when combined with a similar condition on restrictive modification.

[1] Kaplan, D., 1989. *Themes from Kaplan*. Oxford University Press on Demand. [2] Wolter, L., 2009. *Demonstratives in philosophy and linguistics*. *Philosophy Compass*, 4(3), pp.451-468. [3] Heller, D. and Wolter, L., 2014. *Beyond demonstratives: Direct reference in perceptually grounded descriptions*. *Journal of Semantics*, 31(4), pp.555-595. [4] Aloni, M., 2001. *Quantification under conceptual covers* (p. 204). Amsterdam: Inst. for Logic, Language and Computation. [5] Aloni, M., 2013. *Questions, identity and knowledge*. Ms. [6] Bach, E.W., 1974. *Syntactic theory*. Holt, Rinehart and Winston. [7] Groenendijk, Jeroen & Martin Stokhof. 1984. *Studies in the semantics of questions and the pragmatics of answers*: University of Amsterdam PhD dissertation.